

IN THE CLAIMS:

1. (original) An electrolytic solution for use in nonaqueous electrolytic lithium secondary cells which contains a room temperature molten salt, i.e., an aliphatic quaternary ammonium salt of the formula (1), an organic solvent and a lithium salt of the formula (2), the electrolytic solution being characterized in that the organic solvent contains vinylene carbonate in an amount of 1 to 5 wt. % based on the electrolytic solution



wherein R¹ to R³ are each a chain hydrocarbon having 1 to 4 carbon atoms, R⁴ is methoxymethyl, ethoxymethyl, propoxymethyl or isopropoxymethyl, and X¹ and X² are each a fluorine-containing anion.

2. (original) An electrolytic solution according to claim 1

wherein at least one of the fluorine-containing anions X^1 and X^2 contains tetrafluoroborate.

3. (currently amended) An electrolytic solution according to ~~any one of claims 1 and 2~~ claim 1 wherein the room temperature molten salt is contained in an amount of 1 to 15 wt. % based on the electrolytic solution.

4. (currently amended) An electrolytic solution according to ~~any one of claims 1 and 2~~ claim 1 wherein the room temperature molten salt is contained in an amount of 4 to 13 wt. % based on the electrolytic solution.

5. (currently amended) An electrolytic solution according to ~~any one of claims 1 and 2~~ claim 1 wherein the room temperature molten salt is contained in an amount of 4 to 9 wt. % based on the electrolytic solution.

6. (original) A nonaqueous electrolytic lithium secondary cell comprising a positive electrode, a negative electrode, a separator and a nonaqueous electrolytic solution, the secondary cell being characterized in that the electrolytic solution according to claim

1 is used as the nonaqueous electrolytic solution.

7. (currently amended) A secondary cell according to claim 6
~~wherein the electrolytic solution according to claim 2 is used as~~
~~the electrolytic solution wherein at least one of the fluorine-~~
~~containing anions X¹ and X² of the formulas (1) and (2) contains~~
tetrafluoroborate.

8. (currently amended) A secondary cell according to claim 6
~~wherein the electrolytic solution according to any one of claims 3~~
~~to 5 is used as the electrolytic solution wherein the room~~
~~temperature molten salt of the electrolytic solution is contained~~
in an amount of 1 to 15 wt. % based on the electrolytic solution.

9. (currently amended) A secondary cell according to ~~any one~~
~~of claims 6 to 8~~ claim 6 which is characterized in that negative
electrode is a carbon material which absorbs and desorbs lithium
ions.